REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Amendments to Claims

Independent claims 1, 7, and 13 have been amended to clarify that the positioning member is located in a space defined between the windings, and that the positioning member is directly aligned with whichever of the strong magnetic areas is closest to the positioning member. In addition, corresponding amendments have been made for antecedence purposes to the second paragraph on page 2 of the specification.

The reason for this amendment is to emphasize that the positioning member is in fact *between* the windings, and not stacked above or below the windings, and that the positioning member in fact faces the stator magnets, with no intervening structures such as a circuit board or the like.

It is respectfully submitted that the direct alignment and location of the magnets between the coils is clearly supported by the original drawings and specification, and that entry of the amendments is appropriate because the amendments either place the application in better form for appeal, or because the amendments clearly place the application in condition for allowance.

2. Rejection of Claims 1, 2, 4-6, 13, and 14 Under 35 USC §102(b) in view of U.S. Patent No. 4,891,537 (Shiraki)

This rejection is respectfully traversed on the grounds that the Shiraki patent fails to disclose or suggest a motor in which a rotor positioning member is situated between the windings of the stator, rather than being positioned below the windings as in the Shiraki patent, , so as to be directly aligned with the closest magnet when the rotor is stopped.

As shown in Fig. 6 of the Shiraki patent, while the positioning magnet 34 of Shiraki does serve to align the rotor at start-up, it is stacked below the stator coils rather than being located between the coils, and is only indirectly aligned with a corresponding rotor magnet, with the circuit board and coils being positioned between the positioning magnet 34 and the rotor. Because the positioning member is located beneath the circuit board on which the coils are situated, the positioning member of Shiraki cannot be said to be located in a space between the coils, as claimed, or directly aligned with any of the magnets.

This structural difference is not merely a matter of design choice. The positioning magnet 34 of Shiraki is located below the circuit board and not between the windings because it not only positions the motor at start-up, but is used for generating a "**cogging torque**." The cogging torques contribute to the generation of torques by the armature coils during operation of the motor. The positioning magnet of the invention is situated so as to have a neutral effect on operation of the rotor, except at start-up.

Moreover, with respect to claim 14, it is respectfully noted that the Shiraki patent fails to disclose a strong magnetic area **radially** aligned with the positioning member, as claimed. Instead, the Shiraki patent at best discloses a magnet rotor that is **longitudinally** aligned with the positioning member since the positioning member is spaced from the rotor magnet in a direction parallel to the axis of rotation of the rotor (defined by shaft 19).

Since none of the other references of record discloses or suggests modification of the positioning member of Shiraki so as to be located *between* the stator coils rather than below one of the coils (claim 1), to be directly aligned with corresponding magnetic areas of the rotor when the rotor is not rotating (claim 1), or to be radially aligned with the rotor (claim 14), it is respectfully submitted that the Shiraki patent neither anticipates nor renders obvious the claimed invention, and withdrawal of the rejection of claims 1,2, 4-6, 13, and 14 under 35 USC §102(b) is respectfully requested.

3. Rejection of Claim 3 Under 35 USC §103(a) in view of U.S. Patent Nos. 4,891,537 (Shiraki) and 6,353,275 (Nishiyama)

This rejection is respectfully traversed on the grounds that the Nishiyama patent, like the Shiraki patent, fails to disclose or suggest a motor in which the base of the motor includes a positioning member situated in a space between stator windings and arranged to attract, and be directly aligned with, whichever of the strong magnetic areas of the rotor is closest. In fact, Nishiyama fails to disclose any sort of positioning member, whether in the form of a permanent magnet or not, the only magnetic members disclosed in Nishiyama being the rotor magnets. Accordingly, withdrawal of the rejection of claim 3 under 35 USC §103(a) is respectfully requested.

4. Rejection of Claims 7 and 9-11 Under 35 USC §103(a) in view of U.S. Patent Nos. 4,728,833 (Shiraki) and 6,342,742 (Kim)

This rejection is respectfully traversed on the grounds that the Kim patent, like the Shiraki and Nishiyama patents, fails to disclose or suggest a motor in which the base of the motor includes a positioning member situated between the windings and arranged to attract and be directly aligned with whichever of the strong magnetic areas of the rotor is closest. Instead, element 39 of Kim, described in col. 8, line 6 as a "magnetic member. . .[for] causing the rotary member 10 being rotated by the external power supply [to be] stopped at a fixed location," is mounted on either the upper or lower stator bobbin, and the rotor is a unipolar magnet structure. Accordingly, withdrawal of the rejection of claims 7 and 9-11 under 35 USC §103(a) is respectfully requested.

5. Rejection of Claim 8 Under 35 USC §103(a) in view of U.S. Patent Nos. 4,728,833 (Shiraki), 6,342,742 (Kim), and

This rejection is respectfully traversed on the grounds that the Bruno patent, like the Shiraki and Kim patents, fails to disclose or suggest a motor in which the base of the motor includes a positioning member situated between motor windings and arranged to attract and directly align with whichever of the strong magnetic areas of the rotor is closest. Instead, like the Nishiyama patent discussed above, the Kim patent does not disclose any sort of

magnetic positioning member. Accordingly, withdrawal of the rejection of claim 8 under 35 USC §103(a) is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

BACON & THOMAS, PLLC

By: BENJAMIN E. URCIA
Registration No. 33,805

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BACON & THOMAS, PLLC
625 Slaters Lane, 4th Floor
Alexandria, Virginia 22314

Telephone: (703) 683-0500

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